## COMMENSAL FORAGING BY A FAN-TAILED WARBLER (EUTHLYPIS LACHRYMOSA) WITH A NINE-BANDED ARMADILLO (DASYPUS NOVEMCINCTUS) IN SOUTHWESTERN MEXICO

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ABSTRACT—Many interspecific commensal foraging interactions involving birds have been documented. We describe an observation of commensal foraging by a fan-tailed warbler (*Euthlypis lachrymosa*) with a nine-banded armadillo (*Dasypus novemcinctus*) in Guerrero, southwestern Mexico. Our observation is similar to those reported from El Salvador by (Komar and Hanks, 2002) and indicates

this association between fan-tailed warblers and nine-banded armadillos is more widespread than previously reported.

RESUMEN—Se han documentado varias interacciones comensales ínterespecíficas del forrajeo que involucran a aves. Se describe una relación de forrajeo comensal por un chipe roquero (*Euthlypis lachrymosa*) y un armadillo de nueve bandas (*Dasypus novemcinctus*) en Guerrero, suroeste de México. Esta observación es similar a las reportadas en El Salvador por (Komar y Hanks, 2002) e indica que la relación entre el chipe roquero y el armadillo de nueve anillos es más amplia que se conocía.

Many species are known to opportunistically forage on prey disturbed by other species. Numerous examples of such commensal foraging behavior are available in avian literature. Among them are cattle egrets (Bubulcus ibis) and cowbirds (Molothrus) foraging alongside large mammals (Telfair, 1994; Skutch, 1996); avian attendants of army-ant swarms (Coates-Estrada and Estrada, 1989; Swartz, 2001); certain raptors securing prey by following monkeys (Fontaine, 1980; Zhang and Wang, 2000) and maned wolves (Chrysocyon brachyurus; Silveira et al., 1997); and seabirds feeding in association with foraging marine mammals (Camphuysen and Webb, 1999; Clua and Grosvalet, 2001). These commensal interactions benefit the avian species while having little or no affect on the other.

Komar and Hanks (2002) reported the first observations of fan-tailed warblers (Euthlypis lachrymosa) foraging with nine-banded armadillos (Dasypus novemcinctus). Their sightings occurred at El Imposible National Park in southwestern El Salvador during the dry season. Each of their 2 sightings involved a single fan-tailed warbler and a single armadillo, although park guards reported seeing 2 to 4 fan-tailed warblers with single armadillos at other times. While fantailed warblers are known to follow army-ants (Sutton, 1951) and other passerine species (Robbins, 1981) in an effort to procure flushed prey, this was the first report of them foraging in association with a mammal. Armadillos often search for prey by rummaging in leaf-litter on the forest floor. In so doing, they disturb arthropods that can become available to an opportunistic fan-tailed warbler. Here we report an observation similar to that of Komar and Hanks (2002), but from a different location within the geographic range of the fan-tailed warbler.

On 16 January 2005, from 1855 to 1900 h, we observed one fan-tailed warbler closely following a nine-banded armadillo. Our sighting occurred during the dry season in southwestern Mexico, at Aztlán Ecological Park, Ixtapa, Guerrero

(17°67'N, 101°65'W). The habitat was lowland dry forest near sea level, with a well-developed understory and leaf-litter covering the ground. While observing birds at the park, we heard rustling noises coming from ground level approximately 7 m from the edge of the path. We spotted a nine-banded armadillo slowly walking and rummaging through the leaf-litter. A single fan-tailed warbler was observed closely following the armadillo and searching through the disturbed leaves. The warbler maintained a distance of approximately 10 to 15 cm from the tail tip of the armadillo during the entire 5-minute observation. At one point, the armadillo turned around and faced the warbler, but the warbler maintained its distance. The armadillo then walked back in the direction it came from, and the warbler moved around to resume following the armadillo from behind. Observation ceased after the armadillo and warbler were no longer visible. We did not see the warbler capture any prey, but it often pecked at or overturned leaves in the wake of the armadillo. The warbler was clearly searching for prey flushed by the foraging armadillo. It was obvious that the fan-tailed warbler was profiting from this interaction, while there seemed to be no apparent benefit to the armadillo. This observation provides evidence that this interesting association between these 2 species is more widespread than previously known.

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